

## EQA round: TDM1/23 - Therapeutic Drugs

Setup: groups - measurement principle; Slovakia; minimal size of the groups n = 5

RoM = robust average	AV = assigned value	D <sub>max</sub> = acceptable difference
SD = standard deviation	CVP = consensus of all participants	LL = lower limit
CV = coefficient of variation	U <sub>AV</sub> = expanded uncertainty of the assigned value (k = 2)	UL = upper limit
N <sub>tot</sub> = total number of the results		N <sub>eva</sub> = number of the results assessed
N <sub>out</sub> = number of the results removed before calculation		N <sub>suc</sub> = number of successful results
		S <sub>rel</sub> = relative success

Test Sample Group	[unit]	RoM	SD	CV [%]	N <sub>tot</sub>	N <sub>out</sub>	Comparability					Traceability						
							AV	U <sub>AV</sub>	D <sub>max</sub>	LL	UL	N <sub>eva</sub>	N <sub>suc</sub>	S <sub>rel</sub> [%]	AV	U <sub>AV</sub>	D <sub>max</sub>	LL
<b>Set 1</b>																		
(81) Digoxin	[µg/L]				14													0
Sample A1		1,88	0,29	15	14		CVP	1,92	0,051	30%	1,34	2,5		14	14	100		0
(4) LIA, ILMA		1,82	0,46	25	7	0								7				
(6) Immunoturbidimetry, KIMS		1,92	0,067	3,5	5	0								5				
Other					2	0								2				
							2x 2											
Sample B1		1,6	0,26	16	14		CVP	1,61	0,045	30%	1,12	2,1		14	14	100		0
(4) LIA, ILMA		1,57	0,42	27	7	0								7				
(6) Immunoturbidimetry, KIMS		1,59	0,045	2,8	5	0								5				
Other					2	0								2				
							2x 2											
(84) Phenobarbital	[mg/L]				6									6	4	67		0
Sample A1														6	5	83		0
Other					6	0								6				
							4x 4, 2x 6											
Sample B1														6	5	83		0
Other					6	0								6				
							4x 4, 2x 6											
(85) Phenytoin	[mg/L]				2									2	2	100		0
Sample A1														2	2	100		0
Other					2	0								2				
							1x 2, 1x 4											
Sample B1														2	2	100		0
Other					2	0								2				
							1x 2, 1x 4											
(86) Carbamazepin	[mg/L]				10									10	9	90		0
Sample A1														10	9	90		0
Other					10	0								10				
							1x 1, 3x 2, 3x 4, 3x 6											
Sample B1														10	10	100		0
Other					10	0								10				
							1x 1, 3x 2, 3x 4, 3x 6											
(88) Valproic acid	[mg/L]				12									12	11	92		0
Sample A1		97,8	6,8	6,9	12		CVP	98,4	1,8	20%	78,7	119		12	12	100		0
(6) Immunoturbidimetry, KIMS		99,2	1,2	1,2	5	0								5				
Other					7	0								7				
							1x 1, 3x 2, 3x 4											
Sample B1		39	4,5	12	12		CVP	39,2	0,94	20%	31,3	47,1		12	11	92		0
(6) Immunoturbidimetry, KIMS		39,1	2,9	7,4	5	0								5				

## EQA round: TDM1/23 - Therapeutic Drugs

Deadline: 28.4.2023

Setup: groups - measurement principle; Slovakia; minimal size of the groups n = 5

Test Sample Group	[unit]	RoM	SD	CV [%]	N <sub>tot</sub>	N <sub>out</sub>	Comparability					Traceability					
							AV	U <sub>AV</sub>	D <sub>max</sub>	LL	UL	N <sub>eva</sub>	N <sub>suc</sub>	S <sub>rel</sub> [%]	AV	U <sub>AV</sub>	D <sub>max</sub>
Other					7	0	1x 1, 3x 2, 3x 4					7					
<b>(91) Lithium</b>	[mmol/L]				2							0					
<b>Sample A1</b>												0					
Other					2	0						2x 99					
<b>Sample B1</b>												0					
Other					2	0						2x 99					
<b>(82) Theophylline</b>	[mg/L]				4							0					
<b>Sample A1</b>												0					
Other					4	0						2x 2, 2x 4					
<b>Sample B1</b>												0					
Other					4	0						2x 2, 2x 4					
<b>Set 2</b>																	
<b>(89) Amicacin</b>	[mg/L]				5							5 3 60					
<b>Sample A2</b>												5 3 60					
Other					5	0	4x 2, 1x 6					5					
<b>Sample B2</b>												5 3 60					
Other					5	0	4x 2, 1x 6					5					
<b>(90) Gentamicin</b>	[mg/L]				13							13 11 85					
<b>Sample A2</b>		8,98	1,5	17	13							13 11 85					
(4) LIA, ILMA		9,64	0,46	4,8	5	0	CVP	9,7	0,28	31%	6,69	12,8	5				
Other					8	0	1x 1, 4x 2, 2x 6, 1x 6/60					8					
<b>Sample B2</b>		7	1,1	15	13							13 12 92					
(4) LIA, ILMA		7,04	0,5	7,2	5	0	CVP	7,41	0,36	31%	5,11	9,71	5				
Other					8	0	1x 1, 4x 2, 2x 6, 1x 6/60					8					
<b>(93) Methotrexate</b>	[µmol/L]				4							4 3 75					
<b>Sample A2</b>												4 3 75					
Other					4	0	1x 2, 3x 4					4					
<b>Sample B2</b>												4 4 100					
Other					4	0	1x 2, 3x 4					4					
<b>(92) Vankomycin</b>	[mg/L]				14							14 13 93					
<b>Sample A2</b>		14,1	0,99	7	14							14 14 100					
(4) LIA, ILMA		14,5	0,67	4,6	6	0	CVP	13,8	0,34	28%	9,93	17,7	6				
Other					8	0	1x 1, 4x 2, 3x 6					8					

